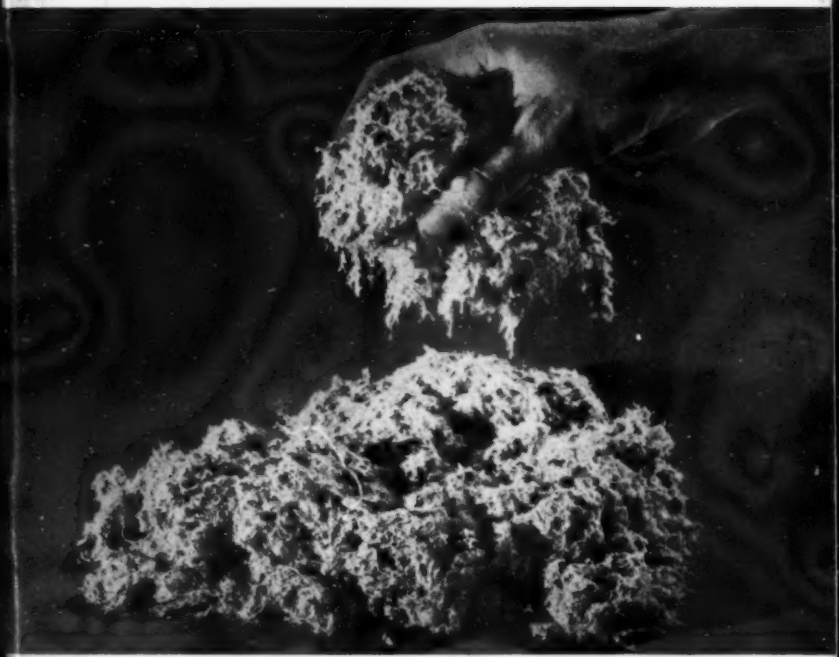
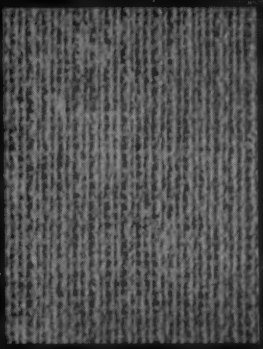
ASBESTOS



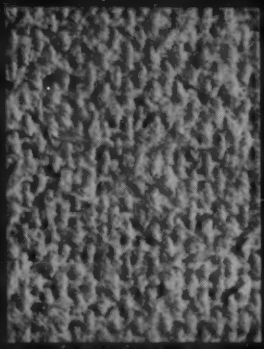
Canadian Milled Chrysotile Asbestos Fibre from the Thetford Mines District, Quebec

JANUARY 1959

New, lighter R/M lagging cloths reduce insulation costs



New #20P070 asbestos lagging
Weight: 0.70 lb. per sq. yd.



New #10P111 Glassbestos lagging
Weight: 0.110 lb. per sq. yd.

Here are three reasons why you should use the new R/M lagging cloths on your shipboard insulation contracts:

1. **They are lighter** — Save 20-50% in weight compared to standard Class 5 lagging cloth
2. **They are lower in cost** — Style 20P070 costs 29% less, and 10P111 costs 20% less, than 1.40 lb. Glassbestos® cloth
3. **They are strong** — Adequate tensile strength for marine applications and steam generating plants

Ask for complete information and samples

R M

RAYBESTOS-MANHATTAN, INC.
ASBESTOS TEXTILE DIVISION, Manheim, Pa.

FACTORIES: No. Charleston, S.C.; Manheim, Pa.; Bridgeport, Conn.; Paramount, Calif.; Passaic, N.J.; Neenah, Wis.; Crawfordsville, Ind.; Peterborough, Ontario, Canada

RAYBESTOS-MANHATTAN, INC., Asbestos Textiles • Laundry Pads and Covers • Mechanical Packings • Brake Linings • Brake Blocks Clutch Facings • Rubber Covered Equipment • Industrial Rubber Engineered Plastics • Sintered Metal Products • Industrial Adhesives Abrasive and Diamond Wheels • Bowling Balls

"ASBESTOS"

FOUNDED IN JULY 1919 AND PUBLISHED
MONTHLY SINCE THAT DATE
BY SECRETARIAL SERVICE
807 WESTERN SAVING FUND BLDG.
S. E. COR. BROAD & CHESTNUT STS.
PHILADELPHIA 7, PENNSYLVANIA

Trust of C. J. STOVER, *Proprietor*
E. E. COX, *Editor*

Entered As Second Class Matter November 23, 1923, at the Post Office at Philadelphia, Pennsylvania, Under Act of March 3, 1879

Volume 40 JANUARY 1959 Number 7

CONTENTS

	Page
GREETINGS TO THE ASBESTOS INDUSTRY	2
OPEN PIT ASBESTOS MINING IN CANADA	12
NEEDLED FELTS FOR THE MANUFACTURE OF ASBESTOS-CEMENT PRODUCTS	20
CHESTER C. KELSEY PASSES AWAY	26
A.S.T.M. COMMITTEE WEEK	26
MARKET CONDITIONS	28
Production Statistics	32
INFILL PANELS FOR CURTAIN WALLING	33
Imports and Exports	34
NEWS OF THE INDUSTRY	40
Automobile Sales	48
Current Range of Price	52
Asbestos Stock Quotations	54
RECENT DEVELOPMENTS IN INORGANIC FIBRE PAPERS	56
Book List	58
The Twelve Estimating Tables	60

ASBESTOS is indexed regularly by Engineering Index, Inc.

SUBSCRIPTION PRICE

United States - - - $3.00 Per Year
Canada - $4.00 Per Year Foreign Countries - $4.00 Per Year
Back Copies - .35 Each Single Copies - (Current) .25 Each
(Payable in U. S. Funds)

Copyright 1958, Maud M. Stover, Trustee, Trust of C. J. Stover

GREETINGS TO THE ASBESTOS INDUSTRY

Editor's Note: Executives in the Industry has responded with enthusiasm to our suggestion to send Greetings and this year we have asked them to tell us what they think was the most important development in the Asbestos Industry during 1958. You will enjoy the various views expressed. We, of course, assume no responsibility for the statements made; the greetings are simply quoted as received.

R. R. Porter, President, Keasbey & Mattison Company

It was evident from market trends more than a year ago that the building trade and general public were responsive to improvements in the appearance of asbestos-cement siding. Measures were taken in 1958 to introduce additional new attractively textured siding in colors with appeal to the broadest possible segment of new home purchasers and home-owners in the remodeling market. As a result, asbestos-cement siding sales are ahead of last year in spite of a slow start last spring when the building industry generally suffered a temporary setback because of fewer housing starts.

There is no doubt that there is good business in the years immediately ahead. To capitalize on this, Keasbey & Mattison Company has embarked on a program of stepping-up its Research and Development activity to develop new products and processes for wider trade and public appeal of its products in the market place. Its new Research and Development Center in Ambler will be completed in 1959, along with the new executive and general office building. Plant production facilities are being improved and augmented at several key locations.

In 1959 and the years ahead, we believe the asbestos industry should be ever on the alert for new products, especially in the residential, commercial and industrial fields, if we are to capitalize on the high level of building activity which will take place in America in the next decade.

I take pleasure in extending to all members of the asbestos industry the Compliments of the Season and a hope for a prosperous 1959.

Exclusive "K&M" FLUID-TITE Coupling is permanently watertight.

From Los Angeles, Cal. to Bar Harbor, Me.

Modern communities all over the country are joining the trend to the modern pipe—"K&M" Asbestos-Cement Pressure Pipe with FLUID-TITE Coupling

- Permanent, water-tight connections
- Non-tuberculating
- Non-electrolytic
- Corrosion-resistant
- Long sections—fewer joints
- Pumping costs remain low
- Your low first cost is often your last cost

Write to us today for more information on how this modern "K&M" Asbestos-Cement Pressure Pipe can cut installation costs and time. And free your community from maintenance worries.

K·M

KEASBEY & MATTISON
COMPANY • AMBLER • PENNSYLVANIA

Melvin H. Baker, Chairman of the Board,
National Gypsum Company

As we look back over the year, it seems to me the most important development in asbestos came through a process for autoclaving. The effect of this was to add stability through minimizing warping while in use. And ,too, I think our merchandising minds are to be commended for creating new styles and colors, destined to popularize the use of shingles on higher priced homes.

In these developments, the groundwork was provided for greater volume. More advertising and sample displays should be done in 1959 to promote the product with home builders. If judiciously done, this would create larger volume for our plants and reduce cost to compensate for the expenditure.

1959 looks like a good year for home building.

J. F. D. Rohrbach, President, Raybestos-Manhattan, Inc.

The challenging year 1958 draws to a close and we should recall our blessings and be thankful that Peace reigns in our great country.

Now that asbestos fibre is in ample supply, we are being challenged to accelerate our research and development activities during 1959 to develop new products for the American way of life.

At this time we extend to all our friends our sincere wish for good health, success, and peace of mind.

A. L. Penhale, President
Asbestos Corporation Limited

It always gives me great pleasure at this time of year to be able, on behalf of our Company, to convey best wishes to our many friends in the Asbestos Industry for a Happy and Prosperous New Year.

1958 has been a trying year for many of us but it would appear that the prospects for 1959 are encouraging.

As always we look forward to serving our customers to the best of our ability in the year ahead.

Cable Address
Asbestic, Thetford Mines

Phone: FEderal
5-9193

JOHNSON'S COMPANY, LTD.
ASBESTOS MINES
MINE AT
THETFORD MINES, QUE.

JOHNSON'S ASBESTOS COMPANY
MINE AT BLACK LAKE, QUE.

HEAD OFFICES
THETFORD MINES, QUE.
CANADA

Producers of RAW ASBESTOS Since 1875

AGENTS

UNITED STATES ... GRANT WILSON, INC., 141 West Jackson Boulevard, CHICAGO 4, ILL.

HARDWARE PRODUCTS CO., 3 Park Place, NEW YORK 7, N. Y.

GREAT BRITAIN ... A. A. BRAZIER & CO. (Asbestos) Ltd., "Avenue Lodge," Bounds Green Road, LONDON, N 22

JAPAN ..... Iwai & Company, Ltd. C. P. O. Box 226 TOKYO

BELGIUM ..... JOS IDE & FILS, 60 Avenue d'Auderghem BRUSSELS 4,

GERMANY ..... ERNST WERNER, Import von Rohasbest, Katharinenstrasse 30, "Edmundhaus," HAMBURG 11,

E. J. O'Leary, President, The Ruberoid Co.

This is a good season at which to reflect on the tremendous progress that has been made in both the production and use of asbestos — especially in asbestos-cement building products — in recent years.

For the first time in many years there appears to be an abundance of fibre and this will inevitably lead us to find new markets and new uses in old markets, a situation that promises new growth and new importance for the industry within the economy.

For the first time, too, it can honestly be said that asbestos-cement products have really come of age. Asbestos-cement experienced its first widespread use in the 30's and the materials contributed importantly to the post-World War II building boom. But in a very real sense it was not until right now that the industry could boast a complete line of siding, roofing and industrial products each one of which is fully tested by time, properly designed for its architectural use and smartly styled for modern taste.

It is particularly fortunate that the present stage of product development coincides with the present state of the economy. I sincerely believe that we are at the beginning of a great new growth period for home building. We felt an inkling of this growth in the second half of 1958; 1959 is confidently predicted to be a better than average year and the needs of our expanding population are likely to assure a growing market for housing far into the foreseeable future.

New housing along with the ever-increasing need to up-date older housing promises the industry many busy years ahead and we are in the best possible position to make those years profitable as well as productive.

The whole Ruberoid organization joins me in wishing everyone in the Industry a happy and healthful 1959.

R. D. Bradford, President
Lake Asbestos of Quebec, Ltd.

In 1958, we began producing fibre from our mine and mill at Black Lake, Quebec.

For the Asbestos Industry, this marked the advent of a brand new source of supply. For us, however, it marked the culmination of years of planning; the challenge and satisfaction of developing a big mine where a lake had been; and the design, construction and successful operation of an efficient, modern mill.

Above all, however, we have enjoyed developing new associations and friendships among the users of asbestos in Canada, the United States and abroad. We have deeply appreciated the interest displayed in our progress by other producers in the Thetford Mines area, and we are indebted to them for the assistance they have given us.

Our investment at Black Lake is proof enough of our complete faith in the future growth and prosperity of the Asbestos Industry. At South Plainfield, New Jersey, we have built a fully equipped research laboratory to help provide basic knowledge that will speed the Industry's expansion.

We are delighted to be associated with the fine and friendly people who produce, market and use asbestos throughout the world.

Warren E. Hill, Vice President, General Manager,
H. K. Porter Company, Inc., Thermoid Division

At the dawn of this new year, I consider it a privilege to greet our many friends in the asbestos industry, and extend our best wishes for the forthcoming year.

Research and development in all phases of our industry is playing an important part in giving better service to our customers. This, plus the ever increasing demand for asbestos (for which there is no substitute) to aid in the great and growing scientific developments, should mean a greater market for all types of asbestos products than ever before.

Confidently and optimistically, we enter into 1959 as a year of opportunity.

A. R. Fisher, Chairman and President,
Johns-Manville Corporation

As an example of Johns-Manville's faith in the future and in line with the Company's policy to seek new sources of asbestos fibre to strengthen our future position in this field, Canadian Johns-Manville Company, Ltd., and a group of investors joined in September with Advocate Mines Limited, of Toronto, to develop an asbestos ore body in northern Newfoundland.

We estimate that it will take about 3½ years before the ore body and mill will be ready for commercial production. By that time, we are confident that world-wide demand for asbestos fibre will absorb Canada's total asbestos output, including that of Newfoundland.

Asbestos is widely used in the construction industry and it appears that in 1959 construction in the United States will pass the $70 billion level for the first time in history. New construction alone will probably exceed $50 billion with another $20 billion for modernization, remodeling, maintenance and repair of existing structures. This will be a big stimulant to our whole economy because construction is the biggest single prop to the national economy.

On November 28 the Southern Rhodesian Asbestos mines of Rhodesian Asbestos Limited, in which Canadian Johns-Manville held a 51 percent interest, were sold to Rhodesian & General Asbestos Corporation (PVT) Limited, a Southern Rhodesian subsidiary of Turner & Newall, of Manchester, England.

We, in Johns-Manville, take pleasure in wishing our friends in the asbestos industry a successful and prosperous 1959 and to extend best wishes of the season to "ASBESTOS".

HAIR FELT

FOR

Low Temperature Insulation

Newark Hair Felt Co.

1000 Maple Avenue

Lansdale, Penna.

Philip A. Meyer, President
Nicolet Asbestos Mines, Limited

To "ASBESTOS" and our many good friends in the Asbestos Industry, we send greetings and all good wishes for the New Year.

In looking back over 1958, I think most of us are glad that it is now behind us. The threat of a general business decline has receded. Ahead of us we see populations the world over increasing giving promise to expanding demands for products including our asbestos.

Research and development of new asbestos products will continue to hold the key to the speed of growth of our industry. There is an ample supply of asbestos fibre for the foreseeable future. Thus an assured source of supply is available to those who would invest in new facilities to produce asbestos products.

For 1959, we subscribe to the opinion of those who believe the Asbestos Industry should do at least as well as 1958 with a good chance for a moderate improvement.

R. H. Dent, Managing Director,
The Cape Asbestos Company, Limited

It is a great pleasure once again to have the opportunity of wishing everyone in the industry success in their enterprises for 1959.

Last year I said that I believed that technical improvement would be the most significant feature in 1958, and I believe that this has been so and will continue to be so.

Every effort to produce higher quality fibre and products, more efficiently and economically, is needed to maintain for the industry the position it occupies today. Signs are that factors which caused some limitation of business in the early part of the year are now more favorable for 1959.

We, in the Cape Asbestos Company Ltd., extend to our friends in the industry all over the world our warmest good wishes for a Merry Christmas and a Happy and Prosperous New Year.

I. J. Harvey, Jr., Chairman of the Board
The Flintkote Company

The year 1959 will be the forerunner of a decade of unprecedented prosperity for the American economy and particularly for the building materials industry.

We, at Flintkote, base our optimism on several factors. For one thing the great upsurge in new family formations in the early 60's seems certain to create a dynamic demand for new construction and will be a powerful factor in the consumer goods economy. The Flintkote Company has been planning for the "fabulous sixties" since early 1956. By embarking on a period of expansion and diversification at that time Flintkote is now in a position of being able to capture an ever increasing share of the American construction and home repair dollar.

In 1959 alone, a 13% increase in outlays for new dwelling unit construction is foreseen. The huge total of 52 billion dollars is expected to be spent on new construction of all kinds in the coming year. This represents an increase of more than 3.5 billion from the total spent in 1958. Over 80 per cent of this enormous amount will be spent on residential and highway construction. And more than one American economist has predicted a 40% increase in the domestic economy by 1970.

As we approach this key period of the 1960's, Flintkote will continue to look at new expansion and diversification possibilities in a never-ending effort to improve our position as a publicly-owned corporation, our products for the trade and the consumer, and our profit-margins for our stockholders.

The Editor and Associates appreciate the various Christmas Cards, Greetings and Calendars received from the many kind people in the Industry. Cards were received from all over the world.

We wish to thank those who sent in Greetings (see pages 2 to 11 inclusive). Our readers will find these interesting.

OPEN PIT ASBESTOS MINING IN CANADA

By W. E. Sinclair, M.I.M.M.

To the uninitiated, the process of extracting the asbestos-bearing rock (ore) from a mineral deposit, to recover the fibre, would appear to follow along common lines in every mine, except that work may be carried out either on the surface or under ground.

Theoretically there is a modicum of truth in such a supposition, although in practice, there are many differences, depending, not only on whether mining is on or below the surface, but on the physical form of the ore-body and the class of equipment used.

Actually, in Canada, there is a fundamental sameness in these conditions since most of the deposits occur in massive form in serpentine rock formations and the means of attack, either in open-pit or underground operations, follow principles based on experience gained during more than half a century of working on these fields. During this time practice in every section of mining, development and exploitation has kept in step with up-to-date and modern techniques to ensure maximum efficiency and low cost extraction of large tonnages. The fact that most of the mineral deposits are of ample proportions has certainly assisted in planning effective development and the best possible layout of mining methods.

In the circumstances, it is natural that an almost standard system of mining has evolved through the various fields where primary conditions are similar.

As most of the massive serpentine deposits occur in relatively flat country the usual layout, in the initial open-cut operations, generally follows a circular or spiral form of descending levels from the surface down to the lowest economic working limits.

There are at present nine mines working open-pits, some of which are operating underground as well, or otherwise are developing in readiness to gradually switch over completely to underground extraction.

An outstanding example is the Jeffrey Mine (Canadian Johns-Manville Co., Ltd.) located at Asbestos in the Quebec Eastern Townships. This oval shaped pit, nearly

CANADIAN ASBESTOS

THE NICOLET ASBESTOS MINE
Norbestos (via Warwick)
Que.

Address Inquiries to:

NICOLET INDUSTRIES, INC.

ASBESTOS FIBRE DIVISION

Nicolet Avenue

Florham Park*, New Jersey

*Suburb of New York City.

3,000 feet along the major axis, and some 2,200 feet across, constitutes the largest asbestos mine in the world. The depth to the lowest level is over 400 feet and there are seven or more working benches, each 35 feet high, spiralling down from the surface to the bottom. A graded road is arranged to allow transport of ore from level to level and up to the surface and the delivery of equipment down to the different levels, as may be necessary.

Work on this pit was commenced in 1881 and now, after nearly eighty years of continuous operation, the huge ore-body is almost worked out to the lowest level by economic surface methods and resource must, at this stage, be made to continue, working at depth by underground methods.

The massive ore-body that constitutes the Jeffrey Mine is the result of the serpentinization of peridotite in the formation which is known locally as the "Serpentine Belt'. Mineralization consists of chrysotile asbestos in cross fibre veins (some slip-fibre also occurs in places) occurring in a stockwork form. The ore is defined in certain zones which, towards the outside of the main body, merge into unaltered peridotite and other country rocks. Here, the distribution of the asbestos veins gradually peters out where serpentinization is incomplete.

The process of breaking down the ore around the benches and loading same for transport to the mill follows along orthodox open-cut methods similar to those applied in most open-cast undertakings in this great field. The main difference in the Jeffrey pit, however, is the matter of size. Up until fairly recently ore from the pit formed a substantial part of the daily output to the mill. Today, underground operations are contributing the major portion of the 20,000 tons that is delivered to the mill to the mill for treatment. Nevertheless, work in the open-pit continues on a 5,000 ton a day scale. Selective methods are employed to break down the ore on the different benches where payable rock still remains, to clean up all round and still maintain a supply sufficient to augment the underground contribution.

DRYCOR FELT CO.

STAFFORDVILLE
CONNECTICUT
U. S. A.

Pioneers
and
World's Largest
Manufacturer
of
NEEDLED FELTS
for
ASBESTOS CEMENT PRODUCTS

•

ESTABLISHED STANDARD
for
ECONOMY
DRAINAGE
LONGER LIFE

•

Synthetic Fibre Content Available to Meet Your Individual Requirement

Primary drilling along the benches is done by the use of self-propelling drill waggons using 2-¾ inch to 3 inch bits. Holes are drilled 40 feet deep in 15 feet rows, 3 feet to 6 feet apart, and they are all drilled off-vertical sloping towards the face. Each hole is loaded with from 30 lb. to 50 lb. of dynamite. Today, firing is done by means of the new type of instantaneous blasting cord, electrically detonated, instead of the old form of electric blasting caps. This new type is designed primarily to eliminate the possible contamination of the asbestos ore by pieces of wire or other foreign matter, very often left after the blast, in the older methods.

The broken ore is loaded by electrically operated shovels with capacity ranging from 4 to 6 cu. yards. Smaller shovels and angle-dozers are used for cleaning up remnants and other auxiliary operations, such as loading scattered ore after secondary blasting and also to maintain road gradients and surfaces. Diesel trucks of 22-½ ton capacity are used to transport the broken ore from the pit to the crusher plant. These operations continue day and night on a three shift basis for five days a week.

As a contrast to the enormous spiral pit of the Jeffrey Mine, The Cassiar Mine (Cassiar Asbestos Corporation Ltd.) in northern British Columbia, is small and of totally different aspect physically.

The open-cast workings take the form of steps or benches cut into the sloping spur of McDame Mountain, situated some 6,000 feet above sea level, on which the asbestos ore-body is located. It is obvious that in these conditions this open pit will continue to consist of surface workings, literally, without the need to descend from the surface down to lower levels, although in due course, even here it may be necessary to mine underground.

In some respects the cutting of benches down the slope of the mountain side is easier or, at least, free of some of the drawbacks of normal workings, such as the question of drainage, road grading and transport. Here, there is virtually no up-hill transport of loads, instead,

ASBESTOS

MINERS SINCE 1878

ASBESTOS CORPORATION LIMITED

THETFORD MINES, QUEBEC

REPRESENTATIVES IN

GREAT BRITAIN—W. A. JANITCH
5 LAURENCE POUTNEY LANE
LONDON, EC. 4

ITALY—SOC. FIBRAMIANTO A.R.L.
PIAZZA P. CLOTILDE 6
MILANO (501)

GERMANY—BECKER & HAAG
FERDINANDSTRASSE 58 (HAPAC-HAUS)
HAMBURG 1, GERMANY

AUSTRALIA—C.H. SLADE & CO.
MYRTLE & WILEY STS.
SYDNEY

JAPAN—ASANO BUSSAN CO.
6 MARUNOUCHI 1 CHOME
CHIYODA-KU TOKYO

FRANCE—GEO. PARLY & CIE.
10 RUE DE LA PEPINIERE
PARIS

NORTH AMERICA

BALTIMORE—WALLACE & GALE CO.
115 SOUTH GAY ST.

CHICAGO—THE STARKIE CO.
5461 W. DIVISION ST.

CLEVELAND—C. T. SCHUSTER CO.
3540 NORTON ROAD
CLEVELAND 11, OHIO

DETROIT—GERALD J. FAHEY
6432 CASS AVENUE
DETROIT 2, MICH.

SAN FRANCISCO—L. H. BUTCHER CO.
15TH & VERMONT STS.

NEW YORK — WHITTAKER, CLARK & DANIELS, INC.
260 WEST BROADWAY

MONTREAL — ALBION ASBESTOS PACKINGS LTD.
130 BATES ROAD

TORONTO — CANADIAN ASBESTOS ONTARIO LTD.
27 FRONT ST. EAST

after the diesel trucks are loaded by shovels on the various side-cuts, they run down to deliver the ore to a central loading bin, whence the rock is conveyed by an aerial tramway (14,950 feet long) to the stockpile and mill crushing plant situated some 2,500 feet below the mine.

As already suggested operations on this proposition are comparatively small, as Canadian undertakings go, but will probably increase steadily as development progresses. Actually Cassiar is a new-comer in the lists of Canadian producers, and first in British Columbia. Initial production only seriously started in 1953 when a little over 3,000 tons of asbestos was first produced. Today, the output of fibre is well over 21,000 tons a year (1956), seven times the first production in a matter of three years.

To achieve this total, 5,000 tons of rock must be mined per day, fifty per cent of which is waste removed in stripping overburden and the development of working benches in ore. Mining operations are restricted to a bare five months a year (June to October) on account of the severe climatic conditions. Besides this handicap, the development of the mine has perforce been faced with transportation difficulties and high costs because of the mountainous terrain. All these drawbacks have been successfully overcome and the unavoidable high operating costs are fortunately offset by the value of the asbestos contained in the deposit. This consists of exceptionally high grade ore in which good quality non-ferrous fibre occurs in cross-fibre form, much of which is classed as long spinning grades.

An interesting and unusual feature of the deposit, indicative of the richness of the ore is that the whole of the surface area (extending for at least 1,500 feet by 500 feet wide) was covered by a mantle of talus, consisting of semi-fiberized material resulting from weathering of the outcrops. This material provided a considerable and easy output of enriched ore in the initial mining operations.

A preliminary estimate of the ore reserve in this deposit is reckoned to be between seven and nine million tons.

Ruberoid Asbestos Research...

. . . is a round-the-clock operation at Hyde Park, Vermont. Quality-controlled through each processing step, you can depend on Ruberoid Asbestos for clean, easy-to-identify fibre with minimum moisture absorption. You can depend on Ruberoid Research for the finest in Asbestos Fibre. For samples write:

The RUBEROID Co.

ASBESTOS FIBRE DEPT.

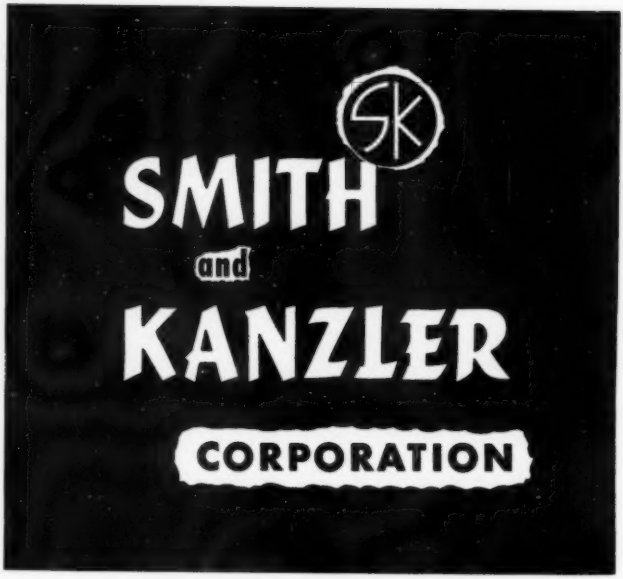
500 Fifth Avenue • New York 36, N. Y.

NEEDLED FELTS FOR THE MANUFACTURE OF ASBESTOS-CEMENT PRODUCTS

By J. Ford (Thos. Hardman & Sons Ltd. Bury, England)

Asbestos-Cement manufacturers may be a little confused by the publicity recently given to needled felts and a few notes on them and their use may be of interest.

Of course, needled felts have been available for many years and were constructed usually of a cotton base fabric of open mesh onto which was attached layer upon layer of non-woven woollen fibres. The method of attachment was by a needle punching machine, a machine which has a large number of barbed needles which punch rapidly into the fabric, pushing the fibres with each outward stroke and because of the direction of the barbs in the needles leaving them entwined on the inward stroke. Adhesion and the formation of a dense, smooth surface was enhanced by a milling process given later. Many readers will be familiar with the common needled felt, for the so-called carpet underlay or underfelt which is held together purely by a needling process. With the advent of synthetic fibres which promised such an improvement in felt performance it was natural to incorporate Nylon or other man-made fibres with the mass of conventional fibres to be needled onto the base fabric and felts were made in the form of a lamination of layers of differing materials. However, adhesion by needling alone did not seem a practical proposition for synthetic fibres because of their slippery nature and a fairly large proportion of wool was generally thought necessary to give the required stability to the structure. However, experiments had been made with felts woven wholly from Nylon fibres on conventional lines and were introduced as a standard article by ourselves as long ago as 1953. The life given by these products was such that it was obvious that their future was assured, but it was also obvious that a great deal of research was still required to overcome difficulties in running them on machines designed for the old type felts. Great strides were made to increase



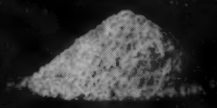
Asbestos Cements
Asbestos Millboard
Asbestos Rollboard
Corebestos Panel Fill
Commercial Asbestos Paper
Pipe and Block Insulation for Heat and Cold
Asbestos Felts and Paper for Saturating
Spraycraft Fireproof Acoustic Plaster

1414 E. LINDEN AVE. **LINDEN, N. J.**

dimensional stability and it became apparent that if greater cushion could be provided even better results would ensue. To raise a nap on the felt gave the required cushion, but owing to the non-felting properties of Nylon the nap became loose and stringy and caused problems with the product being manufactured. During our research we turned our attention to the needling process and ultimately produced what we term our needle-reinforced all-Nylon felt. Patents were applied for in a great many countries and our faith in our new product has been amply justified. Briefly, the felt is a wholly woven structure composed entirely of man-made fibres. The porosity and strength are varied according to the construction in exactly the same way as a conventional non-needled felt according to machine requirements. Its surface is either smooth or less smooth according to the finish required and the individual fibres are needled into themselves at numerous points but are still part of the felt construction and still attached (in addition to the needling process) to the original yarn at one end. In fact each fibre is at all times still part of the primary yarn used in the weaving of the felt. This point is of tremendous importance for it prevents to a large extent fibres being pulled out by the suction box.

Not unnaturally our knowledge of this type of felt is greater than of others and it is to our needle-reinforced all-Nylon felt that subsequent remarks apply. Perhaps the first point to which we would draw attention is that there is not just one construction of needle-reinforced all-Nylon felt. It is produced in different weights with different degrees of openness and porosity according to differing user requirements. Each of these differing constructions can have a different surface, from a "bare" effect resembling a conventional felt to an extremely smooth surface which gives practically no felt mark to the sheet. As with every development of note some modification in usage is necessary to obtain optimum results. For instance, motor cars are useless without roads and similarly aeroplanes without airports. With needle-reinforced all-Nylon felts some modification in technique and particularly in felt cleaning is required and these points

CHECK THESE PLUS FACTORS OF THIS 7RF FLOAT!



Sample, Carey-Canadian Fibre *Sample, Fibre "X"*

1. Unusual whiteness

2. Low iron content **3.** Low grit content

4. Uniform fibre length

Carey-Canadian's NEW 7RF-7, now available in commercial quantities has proved to be of extreme interest to resin compounders, joint cement manufacturers and others seeking an air chamber asbestos float with the above properties.

Samples and complete information on 7RF-7 floats may be obtained by writing any address below or by contacting your Carey-Canadian Sales Engineer.

Carey® **ASBESTOS FIBRE**

Carey-Canadian Mines, Ltd., East Broughton Sta., P.Q.
The Philip Carey Co., Ltd., Ville St. Laurent, Montreal 9, P.Q.
The Philip Carey Company • Lockland, Cincinnati 15, Ohio

I propose to deal with in a future article by showing difficulties that have been encountered and how they have been overcome. The modifications suggested are recommended for your consideration because it will generally be found that they are desirable whatever type of Felt is used.

To close this instalment let me enumerate the advantages of needle-reinforced all-Nylon felts.

1. The life they are capable of giving is several times that of conventional felts.

2. Production of asbestos-cement in tons per square foot of felt is much greater than with any other type of felt.

3. The cost of producing a ton of asbestos-cement sheet or pipe is less than with any other type of felt.

4. The felt impression or mark on the sheet can be controlled by design of structure and almost eliminated if necessary.

5. As a chain is as strong as its weakest link, so the strength of an asbestos-cement sheet is governed by the strength at the thinnest place in the sheet, i. e. the indentation of the felt weft, and consequently less weft identation or felt mark makes for a smoother and more level sheet which is consequently a stronger sheet.

6. The needle-reinforced all-Nylon felt does not ravel, i. e. the threads will not pull out or unwind, and if the selvedge is damaged it may be cut off in the sure knowledge that the life will not be impaired.

7. The needle-reinforced all-Nylon felt is very resistant to splits or laddering. Holes which are made in the felt tend to stay as holes and do not run into long splits.

8. The trend of asbestos-cement manufacture is towards greater production, calling for higher machine speeds, extra vats, heavier pressure and increased suction. Speeds and outputs now being obtained are not possible without NYLON felts. The old type cotton warp will simply not stand up to the additional stresses but the NEEDLE-REINFORCED ALL-NYLON FELT takes the greatest stress comfortably and will withstand any machine condition met with up to now.

FOR THE PAST FOUR YEARS
— HARDMANS
ALL NYLON TOP FELTS HAVE BEEN SETTING UP
FANTASTIC RECORDS IN
PRESSURE PIPE PRODUCTION
QUOTE: All Nylon Top Felt installed eight weeks ago is still running
Produced 3,000 tons of 4 mr. pressure pipes on HARDMAN ALL NYLON TOP FELTS

NOW You can obtain equally
FANTASTIC RESULTS
FROM BOTTOM FELTS ON —
MAZZA MACHINES
AND SHEETING FELTS ON —
HATSCHECK MACHINES
BY USING
THE NEW HARDMAN
NEEDLE REINFORCED
ALL NYLON FELT
By special process for which patents have either been granted or applied for in many countries—

Thomas Hardman & Sons, Ltd.
Fernhill Mills
Bury, England

CHESTER C. KELSEY PASSES AWAY

Chester C. Kelsey, Executive Director of the Asbestos-Cement Products Association, died on December 13th at his New Canaan, Connecticut home. Mr. Kelsey was one of the best informed and leading authorities in the building industry.

A former president of the American Society of Association Executives, Mr. Kelsey served as Director of two of the nation's largest trade associations: The National Association of Wholesalers and the Asbestos-Cement Products Association.

A native of Utah, he was a graduate of the University of California. After college he entered the lumber industry and spent 25 years in the manufacturing and wholesaling of that material.

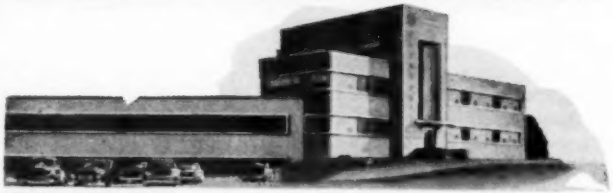
In 1946 he became Executive Vice President of the National Association of Wholesalers and for the past ten years was Director of the Asbestos-Cement Products Association.

A.S.T.M. COMMITTEE WEEK

Approximately 1500 to 2000 members, committee members, and visitors will meet at the American Society for Testing Materials Committee Week meeting in Pittsburgh at the Penn-Sheraton Hotel, February 2-6, 1959. About 30 of the Society's main technical committees will hold some 350 meetings of subcommittees and working groups to advance toward completion the year's committee work in anticipation of preparing reports for presentation to the Society at the Annual Meeting at Atlantic City next June.

John C. Warner, President, Carnegie Institute of Technology and Technical Consultant to the U. S. Delegation to the Second U. N. International Conference on the Peaceful Uses of Atomic Energy at Geneva, Switzerland, will be the guest of honor and speaker at the Committee Week dinner on Wednesday, February 4.

QUALITY-CONTROLLED...



Flintkote's modern research center at Whippany, New Jersey provides the facilities and technical know-how to determine the right fibres for diversified product uses.

...FLINTKOTE Asbestos Fibres

You, too, can gain from experience. The Flintkote Company stresses quality—has manufactured quality products for over fifty years—uses quality-controlled asbestos fibres produced by Flintkote Mines in many of its products.

A wide variety of asbestos fibres now available for *your* use.

For further information and descriptive brochure—Write: The Flintkote Company, East Rutherford, New Jersey.

FLINTKOTE MINES, LIMITED

(Subsidiary of The Flintkote Company) Thetford Mines, P. Q., Canada

MARKET CONDITIONS

GENERAL BUSINESS.

The general market picture continues its steady improvement in almost all lines. There are no indications of a runaway boom but the persistence of the upward trend over the past six months has been somewhat remarkable. As many economists issue their predictions for 1959 we find an almost unanimous belief, based on a wide variety of statistics, that this slow but steady rise will continue throughout 1959 leading to new record highs in total output of goods and services for this coming year. We sincerely hope that this will prove to be the case.

ASBESTOS — RAW MATERIAL.

Shipments of asbestos fibre during November reached a high for the year mainly as a result of the usual heavy seasonal shipments prior to the close of navigation, however, December shipments were on a very much reduced level.

We anticipate total fibre shipments for the year at approximately 15% below 1957.

Current indications for the forthcoming year indicate a slightly higher demand than 1958.

ASBESTOS—MANUFACTURED GOODS.

Asbestos Paper. Orders for this material are slow at the present time and it is anticipated that the volume for 1958 will be somewhat under last year. The *Millboard* market remains about the same — very slow. Orders for *Saturated Paper* have fallen off due to weather conditions.

Insulation — High Pressure. Orders for this material have increased slightly with keen competition for available business. While volume for 1958 increased somewhat during the past four months, the overall volume will be somewhat reduced over the previous year.

Insulation — Low Pressure. Demand for this material has fallen off very badly during the past month.

Asbestos Cement Products. Conditions for this material have not changed — seasonally slow.

Now . . .
starting from the usual

WET ASBESTOS-CEMENT SHEET

A NEWLY-DEVELOPED LINE OF MACHINERY

(Patents Marchioli & Gremigni)

for manufacturing

FITTINGS

OF EVERY SHAPE AND DIMENSION

—TOUGH
—RESILIENT
—COMPACT
—WATERPROOF

PLANTS ALREADY IN OPERATION IN OUTSTANDING FACTORIES

Inquiries for Details, Quotations and References are welcome.

ING. G. MARCHIOLI
22 Morgagni, Milan, Italy
Cable: MINITA—MILANO **Phone: 26 67 27**

November and December volume for *Roofing & Siding* is slightly ahead of the same months in 1957. However, shipments show the usual decline compared to September and October 1958.

The above comments have been made by various informed executives in the Industry. All comments are welcome.

The 1959 British Factory Equipment Exhibition, to be held at London's Earls Court from April 7 to 17, will be a shop window for the world's industrialists. The seventh — and biggest — exhibition will show a wide range of factory equipment for all classes of industry throughout the world.

Within the exhibition itself there will be a self-contained Heat and Sound Insulation Exhibition, the most comprehensive of its kind ever held.

INDUSTRIAL SERVICE COMPANY

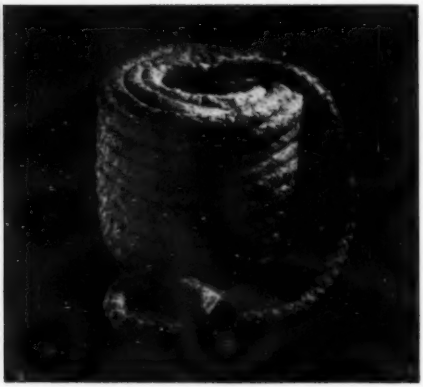
Builders of

ASBESTOS CEMENT MACHINERY

Our experienced engineers and machinists offer the industry entire machines built to deliver maximum production.

Your Inquiries Are Invited

1-51 Paterson Avenue **E. Rutherford, N. J.**



100%

pure Amosite Asbestos CAPOSITE Rope

You can insulate better and cheaper with Caposite Rope because it yields 3 times the footage of ordinary asbestos rope on a pound for pound basis. It can be reapplied repeatedly for service up to 750° F. The flexibility of Caposite provides easy application in all diameters from ½" to 2". Ask for Bulletin 101 and samples.

NAAC

In the United States
NORTH AMERICAN ASBESTOS CORPORATION
Board of Trade Building · Chicago 4, Illinois

In Canada
CAPE ASBESTOS (CANADA) LIMITED
200 Bloor Street East · Toronto, Ont. · Canada

CAPE

Subsidiaries of The Cape Asbestos Co. Ltd., London

Canada

(Dept. of Mines, Province of Quebec)

Tons 2,000 lbs.

Production for October 1958 (Quebec)	93,512 tons
Other Provinces	4,880
	98,392

Total production for October 1957 was 88,991 tons

Africa (Rhodesia)

(Published by Rhodesia Chamber of Mines)

Tons 2,000 lbs.

Production for August 1958	10,713.90 tons
Valued at	£688,121
Production for August 1957	10,831.93 tons
Valued at	£743,123

ANTONY GIBBS & CO., INC., APPOINTED AGENT FOR S. AFRICAN COMPANY

The British Metal Corporation (South Africa) (Proprietary) Limited, Johannesburg, a member of the Group of Companies headed by The British Metal Corporation, Limited, London, have announced that due to their increasing business in Asbestos fibres, it has become necessary to enlarge their storage facilities in the Pietersburg area. *Mr. C. G. Frost*, Managing Director of The British Metal Corporation (South Africa) (Proprietary) Limited, stated in the course of a recent business visit to New York, that in view of this trend and with the object of improving still further his Company's ability to effect prompt deliveries, a new store with integrated office block, has been brought into operation; this new building is said to be the largest of its kind in the Northern Transvaal.

The British Metal Corporation (South Africa) (Proprietary) Limited handle all types of Asbestos fibres produced in Africa, and act as sole selling agents for a number of important mines. Sales on a worldwide basis are effected through the Company's various associates and appointed agents.

While in New York, Mr. C. G. Frost announced that his Company have now appointed Messrs. Antony Gibbs & Company Incorporated, as sole selling agents for the territories of the United States of America and Canada.

INFILL PANELS FOR CURTAIN WALLING

The characteristics of the ideal infill panel for curtain walling are discussed by Mr. Edward D. Mills, F.R.I.B.A., in the latest issue of U.A.M. Group Information, No. 6, 1958.

In an article entitled, "Some Aspects of Curtain Walling," Mr. Mills comments that the use of a wide variety of infill panels has given color and life to many otherwise uninspired structures. But it is the infill panel which has often produced practical and aesthetic problems.

The bulletin contains color illustrations and brief essential information about infill panels utilizing asbestos cement, asbestos insulation board and glass-fibre plastics sheeting to produce various interesting effects.

Copies are available from the U.A.M. Group Advisory Service, Tolpits, Watford, Herts, England.

ASBESTOS FIBRES

ASBESTOS WASTE

Frank G. Ruggles Co. Inc.

26 BROADWAY

NEW YORK 4, NEW YORK

Complete Plants for making

ASBESTOS CEMENT PIPES

Socketed and Non-socketed
Precision Steel Mandrels
Plants for Making Sheets, Autoclaves for Steam Hardening

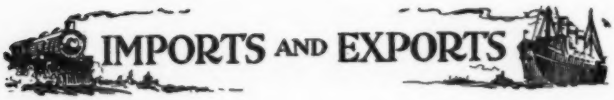
Plants designed, equipped and financed.

ASBESTOS CEMENT ENGINEERING CO.

Hauptstrasse 26

VADUZ-LIECHTENSTEIN (Switzerland)

P. O. Box 34.649



Imports Into U. S. A.

(Figures by Bureau of Census)

Unmanufactured Asbestos:

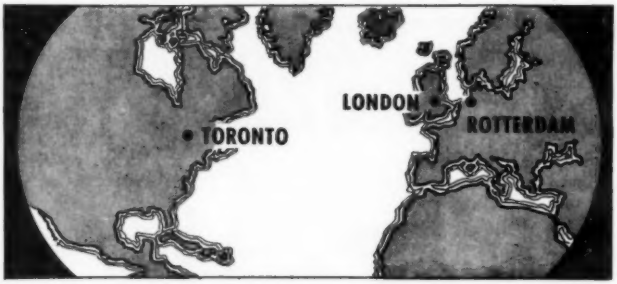
		August, 1958
From:	Canada	48,641
	Union of S. Africa	1,978
	Australia	369
	Rhodesia	330
	Yugoslavia	518
	Other Countries	73
		51,909
	Valued at	$4,999,146

By Grades:

Crude No. 1 Chrysotile, Canada	16
Crude No. 1, Chrysotile, Other Countries	2
Crude No. 2, Chrysotile, Canada	22
Crude, Other, Chrysotile, Yugoslavia	518
Crude, Other, Chrysotile, U. of S. Africa	386
Crude, Other, Chrysotile, Rhodesia (Ny)	63
Crude, Other, Chrysotile, Other Ctys.	6
Crude, Blue, Australia	369
Crude, Blue, U. of S. Africa	505
Crude, Amosite, U. of S. Africa	867
Crude, Amosite, Rhodesia (Ny)	267
Crude, Amosite, Other Countries	1
Textile Fibres, Chrysotile, Canada	888
Textile Fibres, Chrysotile, Other Ctys.	35
Shingle Fibres, Chrysotile, Canada	6,345
Paper Fibres, Chrysotile, Canada	3,728
Other Fibres, Chrysotile, Canada	37,642
Other Fibres, Chrysotile, U. of S. Africa	220
Other Fibres, Chrysotile, Other Ctys.	29
	51,909

Manufactured Asbestos Goods:

	August 1958	
	Quantity (lbs.)	Value
Asbestos Yarn, United Kingdom	39,792	$ 24,483
Asbestos Packing	15,807	5,183
Asbestos Shingles (Impreg.)	12,436	2,004



3 new export-sales offices

National Asbestos Mines Ltd. has appointed three export sales agents to give world-wide service to asbestos users. Gold Bond Asbestos is a light-colored fibre, ideal for use in floor tile and asbestos-cement products. It's made under strict grade control, with a minimum of fines content. Inquiries may be addressed to:

British Metal Corp. (Canada) Ltd.
121 Richmond St. West
Toronto, Ontario, Canada
Cable: Brimetacor

Serving: Australia, New Zealand, Central and South America, Egypt; Near, Middle and Far East; Austria, Switzerland, Yugoslavia.

Gordon Felber (Asbestos) Ltd.
Spirella House, Oxford Circus
London, W-1, England
Cable: Jorog

Serving: United Kingdom, Spain, Portugal, Italy, West Germany, Israel, Indonesia.

International Ore Trading Co. "Wambersie", Ltd., P.O. Box 1182
Rotterdam, The Netherlands
Cable: Wambesco

Serving: Holland, Belgium, Luxembourg, France, Scandinavia, Finland, Africa, (except Egypt).

In The United States: **National Gypsum Company, Buffalo 2, New York**

In Canada: **National Asbestos Mines Ltd., Thetford Mines, P. Q.**

Gold Bond
INDUSTRIAL PRODUCTS

Asbestos Shingles (Not Impreg.)		
Canada	344,291	39,289
Belgium	479,522	39,368
Italy	1,022,025	41,652
Other Countries	117,442	8,366
Asbestos Manufactures — Others	.....	2,850
	2,031,315	$163,195

Exports from U. S. A.

(Figures by Bureau of Census)

	September 1958	
	Tons (2240 lbs)	Value
Unmanufactured Asbestos:		
To: Europe	36	$5,040
Canada	17	1,500
Other Countries	16	2,319
	69	$8,859

Manufactured Asbestos Goods:		September 1958	
		Quantity	Value
Asbestos Cement & Pipe Covering	Lbs.	376,771	$ 76,345
Asbestos Textiles & Yarn	Lbs.	31,548	48,504
Asbestos Packings	Lbs.	64,995	117,304
Asbestos Clutch Facings	No.	93,075	70,686
Asb. Bk. Lng. (Mld. & S. Mld.) Lin.	Ft.	142,706	92,913
Asbestos Brake Lining, Other	Lbs.	320,544	272,018
Asbestos Construction Materials	Lbs.	2,323,438	223,511
Asbestos Manufactures — Others		.....	61,498
		3,353,077	$962,779

„ Tropag "

Hamburg —:— Ballindamm 6

Importers since 1909 of

ASBESTOS-ORES-MINERALS

DURASORB FELTS

give better drainage because . . .

Their special needled construction permits the water to drain faster, even at higher speeds. This is the result of years of research by experienced Designers, to bring you a *new* type of felt — DURASORB — offering maximum water removal while retaining all the other characteristics for long life, finish, stability and uniformity.

Ask your Albany Felt Sales Engineer for full information on the outstanding performance of DURASORB Felts for asbestos-cement shingles, siding and sheets.

AF

ALBANY
FELT COMPANY

Main Office & Plant, Albany, N. Y.
Other plants: Hoosick Falls, N. Y., N. Monmouth, Me.
St. Stephens, S. C., Cowansville, P.Q.

Exports from Canada

(Published by Dominion Bureau of Statistics)

Unmanufactured Asbestos:

	September 1958 Tons (2000 lbs.)	Value
Crude		
United States	30	$ 32,029
United Kingdom	10	18,100
South America	....	....
Central America & Mexico	....	.....
European Countries	1	790
Other Countries	2	1,576
	43	$ 52,495
Milled		
United States	12,439	$2,301,297
United Kingdom	2,105	416,445
South America	2,576	491,183
Central America & Mexico	478	77,496
European Countries	7,683	1,660,117
Other Countries	1,911	321,212
	27,192	$5,267,750
Shorts		
United States	44,115	$2,272,653
United Kingdom	3,325	168,646
South America	230	11,337
Central America & Mexico	168	7,860
European Countries	4,926	287,123
Other Countries	849	71,866
	53,613	$2,819,485
Grand Total—Unmanufactured Asbestos:	80,848	$8,139,730

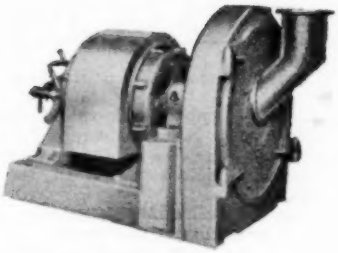
Manufactured Asbestos Goods:	
Brake Lining	$ 37,642
Packing	.....
Other Materials	38,818
	$ 76,460

WILHELM BURGDORF

Importer of Raw Asbestos

P. O. Box 1131, BREMEN, GERMANY

Bauer



Single Revolving Disc Mills

for your wet grinding

In this type of mill, one disc rotates while the other remains stationary.

These famous Bauer machines are used for wet applications in the asbestos industry . . .

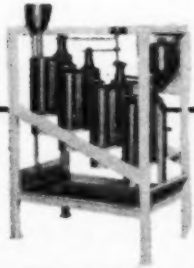
1. To reduce coarse particles—1/16" and larger.
2. To deflock fiber bundles in asbestos slurry, for the production of both paper and cement.

Our mills are adaptable to many specific purposes. We take pride in engineering installations to meet exact requirements. When we encounter new problems, we make tests in our fully equipped research laboratories.

You are invited to consult with us.

THE BAUER BROS. CO.
1826 SHERIDAN AVE.
SPRINGFIELD, OHIO

CANADIAN AGENTS:—Lynn Macleod Engineering Supplies Ltd., Thedford Mines, P.Q.
EXPORT AGENTS:—M. Neumunz & Son, Inc., 90 West St., New York 6, N.Y.



Bauer-McNett Classifier

A widely used device for classifying any sample of slurry into a number of fractions, each containing fibers of the same approximate length. Ask for literature.

NEWS OF THE INDUSTRY

HAPPY BIRTHDAY

F. J. Quinn, 2nd Vice President, Smith Asbestos Products, Inc., Millington, N. J., January 16.

A. F. Heinsohn, Vice President, General Asbestos & Rubber Division, Raybestos-Manhattan, Inc, N. Charleston, S. C., January 17.

Stanley Woodward, Vice Chairman of the Board, The Ruberoid Co., New York City, January 17.

A. F. Matheis, Asst. Vice President, Thermoid Company, Trenton, N. J., January 17.

Sydney L. Miller, Secretary, Asbestos Products Mfg. Corporation, Newark, N. J., January 18.

Richard Bentley, Accounts Director, Australian Asbestos Pty. Ltd., Merrickville, Australia, January 19.

E. C. Nankervis, President, Magnesia-Asbestos Insulation Co., New York City, January 19.

R. W. Bair, District Manager, Armstrong Cork Company, Philadelphia, Pa., January 23.

L. Diener, President, Smith & Kanzler Corporation, Linden, N. J., January 23.

Herbert S. Hirschfeld, Standard Asbestos Company, New York City, January 27.

A. A. Halle, Jr., Vice President & Treasurer, Southern Insulation Corporation, Memphis, Tenn., January 30.

James H. Watters, Chairman, Union Asbestos & Rubber Company, Chicago, Ill., January 30.

Lt. Col. J. G. Ross, Director, Asbestos Corporation Limited, Thetford Mines, Canada, February 1.

Clarke E. Wayland, Vice President, Western Asbestos Company, San Francisco, Cal., February 1.

Alden A. Lofquist, Vice President of Manufacturing, Nicolet Industries, Inc., Florham Park, N. J., February 3.

Hermon Bentley, Managing Director, Australian Asbestos Pty. Ltd., Merrickville, Australia, February 5.

Arthur I. Rank, Universal Insulation Company, Philadelphia, Pa., February 5.

Edward F. Rines, Secretary & Asst. Treasurer, Acme Asbestos Covering & Flooring Co., Chicago, Ill., February 5.

Richard Matthews, Manager, Insulation Dept., Warren & Bailey Company, Los Angeles, Calif., February 6.

George V. Parker, Chairman, Cellactite & British Uralite Ltd., Higham, Rochester, Kent, England, February 8.

R. H. Dent, Joint Managing Director, The Cape Asbestos Co., London, England, February 9.

Wm. A. Bartelt, President, Bartelt Asbestos & Cork Inc., Appleton, Wisc., February 10.

H. A. Hirschfeld, President, Standard Asbestos Co., Inc., New York City, February 11.

Herbert L. Levine, President, Asbestos Products Mfg. Company, Newark, N. J., February 13.

T. C. Hale, Joint Managing Director, The Cape Asbestos Co., Ltd., London, England, February 13.

To all these gentlemen we extend best wishes and congratulations on the occasion of their birthdays.

KEASBEY & MATTISON COMPANY
Changes in Personnel

Hodges B. Childs has been named Administrative Assistant by Keasbey & Mattison Company of Ambler, Pa. He will work on pensions and other employee benefit plans.

He is a graduate of John Hopkins University and the University of Maryland Law School. A member of the Maryland Bar, Mr. Childs was formerly associated with Crown Cork & Seal Company of Philadelphia.

K & M has announced the retirement of *Douglas Graham*, who for the past 21 years has been a salesman in the company's Cleveland District.

Mr. Graham joined the company in 1932, representing the Ambler firm in the Buffalo area. He was transferred to Cleveland in 1937.

FOUNDERS IN GREY IRON AND CHILLED CASTINGS
BRONZE—ALUMINUM
All can be finished "AS CAST" or machined as required.
We are manufacturers of Quebec Standard Asbestos Testing Machine, according to the specifications issued by the National Research Council of Canada, Ottawa.
LA FONDERIE DE THETFORD
Thetford Mines, P.Q., Canada

PHILLIPS ASBESTOS MINES
Producers of
CRUDES
and
FIBERIZED ASBESTOS
The World's Finest Fibres
DRAWER 71 GLOBE, ARIZONA
Mines and Mills in Gila Co., Arizona

ARMSTRONG CONTRACTING & SUPPLY CORPORATION ACQUIRES ARMSTRONG CORK CANADA LIMITED

The Armstrong Contracting and Supply Corporation of Lancaster, Pa., announces the acquisition of the insulation contract operations of Armstrong Cork Canada Limited. This business will be continued by a new Canadian Company, Armstrong Contracting Canada, Limited, which will operate as a wholly-owned subsidiary of Armstrong Contracting and Supply Corporation with offices in Montreal, Toronto, Winnipeg, Clagary and Vancouver.

The new corporation has a background of nearly fifty years in the insulation contracting field in Canada. Armstrong Contracting and Supply Corporation, with offices in forty-seven major cities of the United States, has been actively engaged in this same field for more than fifty years. The consolidation of these two companies makes it possible, through the utilization of the total knowledge and experience of two nation-wide organizations, to offer directly to insulation contract buyers anywhere in the United States and Canada prompt, competent service on low and high temperature projects, from planning through installation, at all locations throughout these two countries and their possessions.

AUSTRALIAN MINERAL INDUSTRY

Australian production and exports of asbestos have continued their upward trend and were at record levels in 1957; imports were the third highest on record. In terms of quantity, production increased by about 51 per cent, exports by about 47 per cent and imports by 14.5 per cent. The Australian asbestos industry has been able not only to consolidate its positions in both oversea and home markets, but it is proceeding with plans to develop resources and to expand further production facilities. In both Western Australia and New South Wales there have been significant developments towards increased production of chrysotile.

Production of all types of asbestos increased considerably in 1957; production of chrysotile was 2,232 short tons, of which 676 short tons were from Baryulgil, New South Wales, and 1,556 short tons from Nunyerry and Lionel, Western Australia. Production of crocidolite at Wittenoom, Western Australia, was, with 12,438 short tons, the highest on record and is expected to be still further increased in 1958 and 1959.

LOW-IRON CHRYSOTILE

A dependable foreign source offering low-iron short and medium length chrysotile asbestos fibre.

Address: Box NO.IJ-NY
"ASBESTOS"
807 Western Saving Fund Bldg., Phila. 7, Pa.

Exporters of

RAW ASBESTOS

ALL GRADES—ALL TYPES

C. J. PETROW & COMPANY (PTY.) LTD.

P. O. BOX 11000 — CABLE: SOTSEBSA

VOLKSKAS BLDG. — 76 MARKET STREET

JOHANNESBURG - SOUTH AFRICA

CSR

THE COLONIAL SUGAR REFINING CO. LTD.

SYDNEY, AUSTRALIA

Sole Distributors for

AUSTRALIAN BLUE ASBESTOS LIMITED
MINES AT WITTENOOM, W.A.

SOLE SELLING AGENTS

- **Minerals Fibres Ltd., Market Buildings Mark Lane, London**
  Argentine, Belgium, Brazil, Chile, Colombia, Denmark, France and French Morocco, Egypt, Eire, Great Britain, Holland, India, Israel, Italy, Mexico, Norway, Pakistan, Peru, Portugal and Portuguese Africa, Spain, Sweden, Switzerland, Turkey, Uganda, Uruguay, Venezuela.
- **Carters (Merchants) Ltd., Winchester House Old Broad St., London**
  Austria, Czechoslovakia, Germany, Hungary, Japan, Poland, U.S.S.R., Yugoslavia.

Australian Blue is an ideal fibre for asbestos cement and for purposes requiring good heat insulation and acid resistance. It has excellent spinning properties. Samples are available on request.

THERMOID MERGER COMPLETED
NEW PORTER DIVISION ANNOUNCED

As a result of action taken by the respective Boards of Thermoid Company and H. K. Porter Company, Inc., and favorable response from more than 80% of stockholders of Thermoid Company, this well-known manufacturer of industrial and automotive rubber and friction products became an important part of a new Thermoid Division of H. K. Porter Company (Delaware) on December 11, 1958.

Porter's new Thermoid Division will manufacture and market all products formerly made by Thermoid Company and Porter's Quaker Rubber Division, which include such brands as "Thermoid", "Quaker", "Quaker Pioneer", "Amco", "V-T", "Southern Asbestos" and "Aeroduct" rubber and friction products for automotive, aircraft and industrial use. The Division's plants are at Philadelphia; Trenton; Pittsburgh, Cal.; Nephi, Utah; Huntington, Ind.; Danville, Ill.; Charlotte, N. C.; and Mexico City.

The new Porter Division is headed by *Warren E. Hill*, former Thermoid president, as Vice President and General Manager, *George Dauphinais* as Vice President—Operations, and the sales organization by *J. R. Alexander*, Vice President—Marketing, and *E. G. Counselman*, General Sales Manager. The Managers of the twelve sales districts will be responsible for both automotive and industrial products and will report to three Regional Sales Managers, East, Midwest, and Pacific.

Customers and distributors of the Thermoid Company and of the former Quaker Rubber Division of H. K. Porter Company, Inc., have been advised that important benefits should accrue to them as a result of the consolidation. The product lines manufactured by Thermoid and by Porter's Quaker Rubber Division are complementary; the consolidation will provide from Porter's Thermoid Division a broader line, higher quality standards, improved manufacturing facilities, and the strengthening of research, development, and marketing that come naturally with this pooling of assets and know-how.

ASBESTOS-CEMENT MACHINERY

Wet machines with Auxiliaries for the production of 24" to 48" wide, flat or corrugated sheets in commercial lengths.

Fiberizing Equipment, Rotary Cutters, Wet and Dry Trimmers, Finishing and Texturing Machines.

Your inquiries are most welcome

LINCOLN IRON WORKS
(Successors to Asbestos-Cement Associates, Inc.)
255 West Street Rutland, Vermont

ASBESTOS FIBRE

OF ALL TYPES

BRANDHURST COMPANY LIMITED

Vintry House

LONDON

E. C. 4

Telephone:	Cables:
London Central 1411	Brandcolim
(Private Branch Exchange)	London

NATIONAL GYPSUM COMPANY ELECTS NEW VICE PRESIDENTS

The election of *Leonard L. Hank* to the Board of Directors of National Gypsum Company has been announced.

At the same time announcement was made of the election of three vice presidents: *Melvin F. Cerruti*, Dealer Sales; *Eugene W. Odenwaldt*, Manufacturing and *S. David Skinner*, Engineering.

Mr. Hank was promoted to Vice President in charge of Operations for National Gypsum, succeeding the late Wells F. Anderson.

In 1946 Mr. Hank joined the Company as manager of the Kalamazoo Paper Plant. In 1954 he was elevated to General Production Manager for the Company's gypsum, paper and insulation board plants. He was named Manufacturing Vice President in 1956.

Mr. Cerruti, who moves up to the new position of Vice President in charge of Dealer Sales, is a 30-year National Gypsum veteran.

Mr. Odenwaldt joined the Company in 1950 as Production Manager for National Gypsum's rock wool insulation plants.

Mr. Skinner was named to the new position of Vice President in charge of Engineering.

PROMOTIONS AT NATIONAL GYPSUM CO.

National Gypsum Company announced the promotions of *John G. Stapler* to General Production Manager and *Maurice C. Crook* as Director of Engineering.

Mr. Stapler succeeds *Eugene W. Odenwaldt* who recently was elected Vice President in charge of Manufacturing. He began his career with National Gypsum in 1951 as manager of the company's Niles, Ohio metal lath plant.

Mr. Crook, a veteran of more than 30 years in the building material industry, started with National Gypsum in 1938 and since 1944 has been the company's assistant Director of Engineering. He succeeds *S. David Skinner* who recently was promoted to Vice President in charge of Engineering.

CABLE ADDRESS: METABEST

METATE ASBESTOS CORPORATION

Producers of

ARIZONA CHRYSOTILE CRUDES

and

FILTRATION FIBRE

Mines & Mill:
SAN CARLOS
INDIAN RESERVATION
GILA COUNTY, ARIZONA

P.O. BOX 111
GLOBE, ARIZONA

BELL ASBESTOS MINES LTD.

THETFORD MINES, QUE.

CANADA

Producers of

Raw Asbestos Crudes

& Fibres

Sales Representatives

for

Cassiar Asbestos Corporation Limited

AUTOMOBILE SALES

	October 1958
Passenger Cars	272,241
Motor Trucks	69,979
Motor Coaches	149
	342,369

In October 1957, a total of 380,176 motor vehicles were sold. In the ten months of 1958 the total was 3,-820,797.

These figures were supplied by the Automobile Manufacturers Association, New Center Building, Detroit, Michigan.

SPECIAL OFFER

Johnson's 3Z Asbestos Fibre
and
Quebec Asbestos Limited 3Z Asbestos Fibre
Original Mine Bags
$350.00 Per Short Ton (2000 Lbs.)
F.O.B. Jersey City, N. J.
ACE ASBESTOS MFG. CO., INC.
451 Communipaw Avenue, Jersey City 4, N. J.

Position Wanted

Well experienced Asbestos-Cement Engineer seeks new position with a progressive employer. Can guarantee to produce best quality and high tonnage of A.C. sheets and moulded goods.

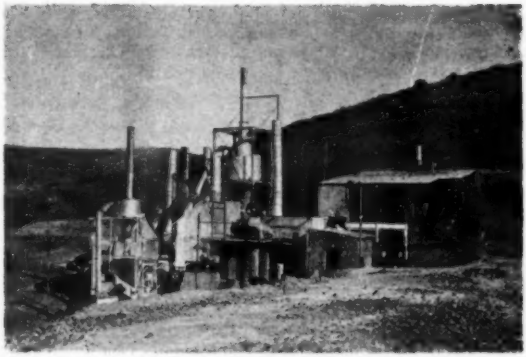
For full resume write Box No. IJN-C
"ASBESTOS"
807 Western Saving Fund Bldg., Phila. 7, Pa.

Antony Gibbs & Co., Inc.

61 Broadway

New York 6, New York

Tel. Digby 4-6580



View of Blue Asbestos Reducing Mill

ASBESTOS FIBRES

Chrysotiles, Blues, Amosites

Agent in the United States for

S. A. ASBESTOS TRADING (PTY.) LTD.

KELLEY ASBESTOS PRODUCTS COMPANY
Changes in Personnel

On January 1st, 1959 the status of certain officers and personnel of Kelley Asbestos Products Company was as follows:

James B. Anchors, having been in the employ of the Company approximately 23 years becomes President; *Manley Alsaker* becomes Vice President and continues in charge of Omaha Branch operations; *George O. Hart, Jr.*, becomes Vice President; *Charles N. Blackmar* continues as Secretary; *David E. Kelley* continues as Treasurer of the Company; *Gladys Warehime* continues in the position of Assistant Treasurer; *Glen Ball*, a Certified Public Accountant, is appointed Assistant Secretary.

In resigning as President of the Company it is planned that as of January 1st, David E. Kelley will accept partial retirement, with the sincere hope that he may continue actively for an indefinite period in sales assistance, consultation, Treasurer's duties, and general usefulness where needed and as a friend to every member of the Organization.

FLINTKOTE PLANS TO BUILD NEW LIME PLANT AT SALT LAKE CITY

The Flintkote Company announced plans for the construction of a new plant at Salt Lake City, Utah, where it will produce "Miracle Lime", the well-known and patented lime product used in building construction.

It is estimated that the new plant, to be built by Flintkote's United States Lime Products Division, will cost in excess of $1 million. "Miracle Lime" is also produced at a plant in Henderson, Nevada.

In June 1957, Flintkote announced plans for construcion of a $2 million lime flux plant at Arroline (near Las Vegas) Nevada. This plant has since been completed and is serving the growing Southern California steel industry.

ASBESTOS CONTRACTORS NEW ENGLAND ASSOCIATION ELECTS OFFICERS

At the Annual Meeting held in December 1958, *John J. Roper*, District Manager of the Boston office of Armstrong Contracting and Supply Corporation, was elected President of the Asbestos Contractors New England Association for the year 1959 and *Roger Roscoe* of New England Insulation Company was re-elected Secretary-Treasurer

IRVING KEVELSON PASSES AWAY

Irving Kevelson, President of Ace Asbestos Mfg. Co., Inc. of Jersey City, N. J., passed away on December 14th.

Mr. Kevelson, an expert on business conditions, particularly in the building industry was President since its inception. He often quoted matters pertaining to the building and asbestos field and wrote several articles on same.

Now in operation: New independent source of Asbestos. **Lake Asbestos of Quebec, Ltd. will produce 100,000 tons of high-quality chrysotile asbestos fibre annually. If you need a new dependable source for high grade asbestos, write to Asarco International Corp., 120 Broadway, New York 5, N. Y., distributor for Lake Asbestos.**

Overseas Sales Representatives:

Metal Traders Ltd.
Asbestos Division
London (for U.K., Spain, Portugal)

Keyser and Mackay
Amsterdam (for The Netherlands, Belgium, Switzerland)

Metal Traders, Inc.
Tokyo, Japan

Atlanta, Bremen
(for W. Germany, Austria)

Ladislao Kohn,
Buenos Aires (for Argentina, Uruguay)

Agencies Kapel Ltda.
Santiago, Chile

G. Vaciago
Torino, Italy

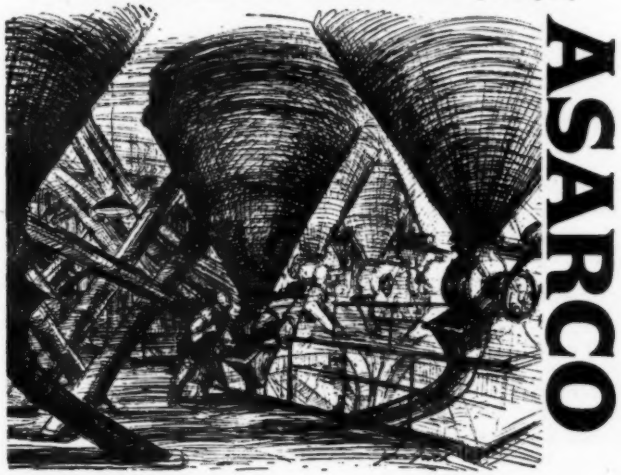
Mount Isa Mines Ltd.
Sydney, Australia

Holanda Colombia, S.A.
Barranquilla,
Colombia

"Brasimet" Comericio 4 Industria S.A.
Rio de Janeiro and Sao Paulo,
Brazil

Dieppedalle & Seilles
Paris, France

LAKE ASBESTOS OF QUEBEC, LTD.
a subsidiary of American Smelting and Refining Company



THE BAUER BROTHERS COMPANY

William M. McNeil, formerly of Chicago, has been appointed General Sales Manager, Industrial Grinding Division, by The Bauer Brothers Company, Springfield, Ohio.

From 1947 until joining Bauer in his new position, Mr. McNeil was with The Celotex Corporation as Production Manager of gypsum and wool operations and later as Assistant to the Vice President, Operations.

CURRENT RANGE OF PRICE

As of January 10, 1959

ARIZONA—	Per Ton of 2,000 lbs., f.o.b Globe, Arizona		
No. 1 Crude (soft)	$1,500.00	to	$2,000.00
No. 2 Crude (soft)	1,000.00	to	1,350.00
No. 3 Crude (soft)	400.00	to	675.00
Filter Fibre (soft)	250.00	to	475.00
No. 1 Crude (semi-soft)	1,200.00	to	1,500.00
No. 2 Crude (semi-soft)	900.00		
No. 3 Crude (semi-soft)	400.00		

CANADA—	Per Ton 2,000 lbs. f.o.b. Mine Canadian Currency		
Group No. 1 (Crude No. 1)	$1,475.00	to	$1,850.00
Group No. 2 (Crude No. 2); Crude Run-of-Mine and Sundry	790.00	to	1,200.00
Group No. 3 (Spinning Fibre)	370.00	to	650.00
Group No. 4 (Shingle Fibre)	180.00	to	245.00
Group No. 5 (Paper)	120.00	to	150.00
Group No. 6 (Waste, Stucco or Plaster)	.....		86.00
Group No. 7 (Refuse or Shorts)	40.00	to	80.00

VERMONT—Per ton of 2000 lbs. f.o.b. Hyde Park or Morrisville, Vt.			
Group No. 3 (Spinning & Fitlering	$ 370.00	to	$ 428.00
Group No. 4 (Shingle Fibre)	181.00	to	200.00
Group No. 5 (Paper Fibre)	120.00	to	152.00
Group No. 6 (Waste, Stucco or Plaster)			86.00
Group No. 7 (Refuse or Shorts)	41.00	to	75.00

J. A. D. MARCOTTE PRESENTED WITH "THE ASBESTOS STORY RING"

At a dinner given in his honor by his Company in Thetford Mines on December 15th, 1958, *Mr. J. A. D. Marcotte*, Director and General Sales Manager of Asbestos Corporation Limited, was presented with "The Asbestos Story Ring" by *Mr. Lorne Bain*, President of Albion Asbestos Packings Limited of Montreal. Mr. Marcotte thus becomes the seventh holder of this exclusive emblem of long and distinguished service in one of Canada's basic industries. He had served 45 years in the Asbestos Industry. More than 36 friends of Mr. Marcotte were present from the Industry throughout Canada and the United States to pay tribute to a man who devoted service for many years has brought honor and distinction to the Asbestos Industry.

Above is a picture of some of the people present on this occasion. A list of the names is as follows: left to right — back row — *I. C. Campbell*, Asbestos Corporation Limited; *C. Bindman*, Johnson's Company Limited; *W. A. Janitch*, Asbestos Corporation Limited of London; *G. W. Smith*, Bell Asbestos Mines Limited; *G. H. Rinehart*, G. H. Rinehart Inc.; *J. C. Kelleher*, Canadian Johns-Manville Co. Ltd.; *G. F. Jenkins*, Asbestos Corporation Limited; *W. W. Oughtred*, Asbestos Corporation Limited; front row — left to right — *Lorne Bain*, Albion Asbestos Packings Limited of Montreal; *J. A. D. Marcotte*, Asbestos Corporation Limited; *A. L. Penhale*, Asbestos Corporation Limited; and *Grant Wilson*, Grant Wilson, Inc.

NATIONAL GYPSUM COMPANY
Change in Personnel

The promotion of *Charles H. Dwyer* as Director of Industrial Relations in charge of National Gypsum Company's personnel and industrial relations has been annouced.

Natioal Gypsum has consolidated into a single staff department all of the company's personnel and industrial relations for sales, operations, research, Buffalo office and its advertising center.

As head of the new company-wide department, Mr. Dwyer will report to President Manske and will hold the title of Director of Industrial Relations.

ASBESTOS STOCK QUOTATIONS

(These figures are compiled from the Commercial & Financial Chronicle. No guarantee as to their correctness.)

		December 1958		
	Par	Low	High	Last
Amer. Br. Shoe (Com)	np	44	47⅝	45
Armst. Ck. (Com)	1	34	39¼	38
Armst. Ck. (Pfd)	np	85	86	85
Asbestos Corp. (Com)	np	33	36¼	35
Carey (Com)	10	37½	46¼	44⅞
Cassiar Asb. Corp.	np	$9.00	$9.40	$9.40
Celotex (Com)	1	35⅝	38⅞	37¼
Celotex (Pfd)	20	17⅞	18¾	18¾
Certainteed (Com)	1	12¾	15⅜	14⅛
Fibreboard Paper Prod. (Com)	np	42¾	52¼	49
Fibreboard Paper Prod. (Pfd)	100	145	168	168
Flintkote (Com)	5	56¼	61¼	58
Flintkote (Pfd)	np	87	90	87
Johns-Manville (Com)	5	48	50⅞	49¼
Natl. Gypsum (Com)	1	55½	59¾	58⅝
Natl. Gypsum (Pfd)	np	92	94	94
Porter Co., Inc., H. K.	1	88¾	89½	89¼
Ray-Man (Com)	1	55¼	57¾	55¼
Ruberoid (Com)	1	38⅛	40¼	38¾
Union Asb. & Rub. (Com)	5	9	11¼	11¼
United Asb. (Com)	1	$6.60	$7.50	$6.75
U.S. Gypsum (Com)	4	94	102	97¾
U.S. Gypsum (Pfd)	100	156	159	158
U.S. Rubber (Com)	5	44½	46½	46
U.S. Rubber (Pfd)	100	146	150½	146¾

RAW ASBESTOS DISTRIBUTORS

LIMITED

FOR CANADIAN, RHODESIAN
AND SOUTH AFRICAN ASBESTOS

ASBESTOS HOUSE • 77-79 FOUNTAIN ST. • MANCHESTER 2
ENGLAND

RECENT DEVELOPMENTS IN INORGANIC FIBRE PAPERS

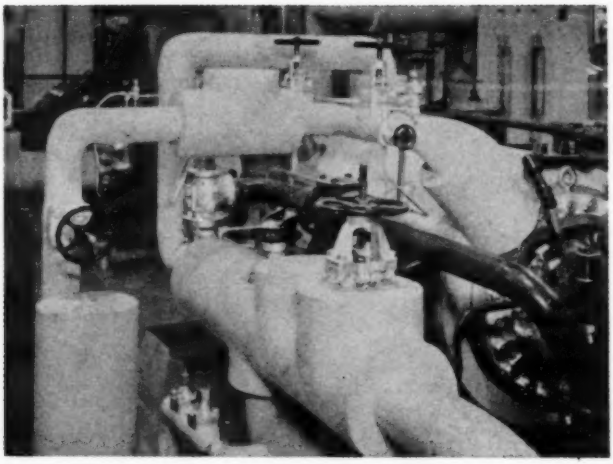
The above article, by C. Z. Carroll-Porczynski, was published in the No. 4, 1958 International Edition, of Industrial Textiles.

Papers made from asbestos, glass and other mineral fibres, for use in electrical insulation, plastics, laminates, air filtration, pipe coverings, etc., have been the subject of much recent research. This article presents a summary of what has been achieved in both the production and application of these papers.

"ASBESTOS" will be glad to lend its copy to interested readers.

The first book ever written on inspecting, testing and supervising the construction of buildings, FIELD INSPECTION OF BUILDING CONSTRUCTION, by Thomas H. McKaig, has just been published by F. W. Dodge Corporation, New York. The material presented in this book is of a completely practical nature, and designed for day-to-day use by architects, engineers, contractors and field inspectors. It is not a textbook, and does not delve into theory. Price is $9.35 each. For further information contact Ann L. Bronaugh, Publicity Director, Dodge Books, 119 West 40th Street, New York 18, N. Y.

A finely-illustrated survey of outstanding multiple dwellings is made in APARTMENTS AND DORMITORIES, a new book by the editors of Architectural Record, just published by F. W. Dodge Corporation, New York. The 53 projects chosen for study were erected between 1950 and 1958, a period of great activity in residential construction generally marked by higher standards than those of previous years. Price is $8.95 each. For further information, contact: Ann L. Bronaugh, Publicity Director, Dodge Books, 119 W. 40th Street, New York 18, N. Y.



Maximum control of temperatures with

PABCO PRECISION-MOLDED CALTEMP

a Calcium Silicate Insulation

Curb expensive heat loss, control temperatures within minimum tolerances with performance-proved Pabco Insulations.
For power plant piping and equipment, a Pabco Insulation insures peak performance wherever temperatures must be maintained up to 1900° F. Pabcc's Caltemp and 85% Magnesia insulations are "Precision-Molded" by a patented process in both pipe and block form. For data on technical advantages... case histories... or engineering consultation, write... or call... a Pabco insulation engineer.

INSULATION GUIDE

Temperature	Recommended Pabco Insulation
to 550° F.	85% Magnesia pipe covering • block • cement
to 1200° F.	Caltemp pipe covering • block • cement
to 1500° F.	Prasco 15 C pipe covering • block • cement
to 1900° F.	Prasco 19 C block

PABCO

INDUSTRIAL INSULATIONS DIVISION

Fibreboard Paper Products Corporation
San Francisco 19 • Chicago 54
Houston 4 • New York 16 • Los Angeles

BOOK LIST

The Asbestos Factbook, 16 pages: Information in comment form on origin, facts, locations, uses of analyses, qualities, 25c per copy.

Asbestos Mining Methods. By C. V. Smith. (Reprint) 16 pages 25c per copy.

Milling Asbestos. By J. C. Kelleher. (Reprint) 16 pages. Companion article to Asbestos Mining Methods. Both should be in every Asbestos Library, 25c per copy.

Recovery of Raw Asbestos. By Roland Starkey. (Reprint) 6 pages. Supplement to Milling Asbestos. 25c per copy.

Canadian Chrysotile Asbestos Classification. Including latest Quebec Testing Method. January 1, 1949 Edition. 4 pages 25c per copy.

Processing Asbestos Fibres. 8 pages. (Reprint). 25c per copy

Tests for Cotton Content. 4 pages (Reprint). Describing several methods of testing asbestos textile for cotton content. 10c per copy.

Chart—Dollars Cost of Uninsulated Pipe. (Reprint), 20c each

Brake Linings of Various Types. By R. T. Halstead, (Reprint) (12 pages) from August, September and October 1949 "ASBESTOS". Price 25c per copy.

Twelve Estimating Tables, with Chart. Convenient in figuring flange fittings and other areas, $1.00 per set.

Manual of Unit Prices. For figuring pipe covering and blocks $1.00 per single copy postpaid. Discount in quantities of 6 or more, postage billed.

Order any of the above from "ASBESTOS," 807 Western Saving Fund Bldg., Philadelphia 7, Pa. Payment should accompany order.

ARMSTRONG CORK COMPANY
Opens New District Office

A new District Office was established in Philadelphia, January 1, by the Insulation Division of the Armstrong Cork Company.

The new District Office will cover the territory now handled by the Philadelphia and Baltimore branches of the New York District Office.

Lawrence P. Chubet, now located in Philadelphia as a representative of the New York Office, will become Manager of the new office. Mr. Chubet joined Armstrong in 1951 after graduating from Syracuse University with a B. S. Degree in Engineering. Following sales training, he was assigned to the New Orleans Office where he served as a salesman until receiving a similar assignment in the Philadelphia Branch Office in 1954.

We take raw asbestos and fashion it to the needs of a thousand and one different consumers. Closely controlled through all stages of manufacture, asbestos is converted into Fibre, Yarns, Tapes, Cloths, Rovings, Tubing and Webbing widely used for heat and electrical insulation. It is also fabricated into many different kinds of friction materials, including the world-famous Mintex brake and clutch linings.

BRITISH BELTING & ASBESTOS LTD.

Cleckheaton, Yorkshire, England

THE TWELVE ESTIMATING TABLES

The Twelve Estimating Tables, with Chart, convenient in figuring flange fittings and other areas, is **$1.00 per set.**

These tables have been found very useful by estimators in figuring areas, but since we have not for some time published the detailed list, it occurred to us that many would like to know exactly what the tables cover. and order them before the fall work begins. Following is the list.

Sq. Ft. Areas of Pipe Covering.

Mean Sq. Ft. Areas Standard Screwed Fittings.

Mean Area Standard Weight Flanged Fittings.

Standard Weight Flange Areas, Permanent Type.

Standard Weight Flange Areas, Removable Type.

Figuring Hair Felt, 1", 1½", 2".

Anti-Frost Insulation.

Cork Pipe Covering, Outside Area in Sq. Ft.

Ice Water Thick Cork Moulded Fittings Screwed, Outside Area in Sq. Ft.

Brine Thickness Cork Moulded Fittings, Screwed, Outside Area in Sq. Ft.

Special Thickness Cork Moulded Fittings, Screwed, Outside Area in Sq. Ft.

Dusts and Flue Perimeters.

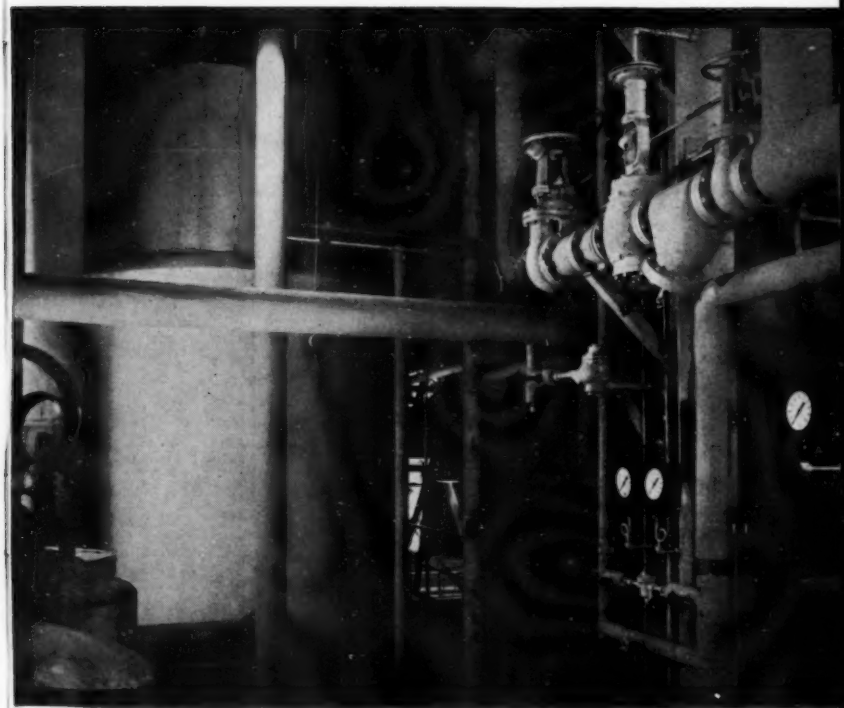
The chart gives an easy way to figure Curved Cylindrical Surfaces.

The tables are printed on paper which will wear well under handling. Orders can be filled immediately upon receipt, write Asbestos 807 Western Savings Fund Bldg., Philadelphia 7, Pa.

ONLY APPROVED CONTRACTORS INSTALL EHRET INSULATIONS

The THERMALITE 85% Magnesia Insulation in this boiler room is typical of the faultless work of Ehret-approved contractors. Only men fully skilled in the application of Ehret products are entrusted with their installation. Result: Full insulating value and long, trouble-free service life with economical heating.

Standard inventories of THERMALITE are maintained by distributors in all principal cities. For the full story of this money-saving insulating material, see your Ehret Distributor or write direct for Bulletin 11C to the address below.



Typical THERMALITE installation. THERMALITE has unusually low thermal conductivity, is molded to exact shape, assuring tight joints and snug pipe fits essential for maximum heat economy.

SAVE HEAT WITH EHRET INSULATIONS

EHRET MAGNESIA MANUFACTURING COMPANY

VALLEY FORGE, PENNSYLVANIA

SOUTHERN ASBESTOS — TEXTILES

SOUTHERN ASBESTOS COMPANY, CHARLOTTE 1, N. C.